that independent claims 28 and 38 are novel. Therefore, Applicants submit that claims 37 and 37, dependent from claim 28, and claims 46 and 47, dependent from claim 38, are allowable without further amendment.

The 35 U.S.C. §102 Rejection

Although the present Office Action provides only a "Response to Arguments" and does not include a page stating the basis of the rejection, Applicants assume that the Examiner maintained the rejection of the previous Office Action and rejected claims 28-35 and 38-45 under 35 U.S.C. §102(b) as being anticipated by Japuntich et al. (U.S. Patent No. 5,509,436). Applicants respectfully request confirmation of this assumption. Furthermore, under this assumption, Applicants respectfully traverse this rejection.

For a claim to be anticipated under 35 U.S.C. § 102(b), each and every element of the claim must be found in a single prior art reference (M.P.E.P. §2131). Applicants respectfully assert that Japuntich et al. fail to teach each and every element of the rejected claims.

The respirators of the present invention include a unidirectional valve including a valve flap, wherein the valve flap has a side profile including a curvature from the first end to the second end when the valve flap is not attached to the valve body (claim 28) or when the valve flap is not attached to the face mask (claim 38). In addition, the curvature, or at least a portion of the curvature, of the valve flap is at least partially flattened when the valve flap seals the valve opening (claim 28) or seals the opening in the face mask (claim 38). That is, the valve flap of the present invention is designed with a curvature that is reshaped into a partially flattened shape when in contact with the valve seat.

It is asserted at page 2 of the present Office Action that "Japuntich discloses a flexible flap **preferably** assum[ing] a flat configuration" and that the presence of the word "preferably" means that "the valve flap taught in Japuntich can have a valve flap with a side profile having a curvature when the valve flap is not installed to a valve body or a face mask, wherein the

curvature, or a portion of the curvature, is at least partially flattened when the valve flap seals the opening and does not have to assume a flat configuration." The Examiner further asserted that "Japuntich discloses a flexible flap [which] **may be** cut from a flat sheet of material" and that the phrase "may be" means that "it is not necessary for the material to be flat but could be curved." Applicants disagree.

"A reference may be relied upon for all that it would have reasonably suggested to one of skill in the art" (M.P.E.P. §2123). Furthermore, in ascertaining the differences between the prior art and the claims at issue requires, *inter alia*, considering the prior art reference as a whole (M.P.E.P. §2141.02). Applicants assert that the Examiner has failed to show how the modifications to Japuntich et al. proposed above are reasonably suggested to one of skill in the art, particularly when considering Japuntich et al. as a whole.

Rather, the Examiner has merely asserted, without substantiation from the document itself, that the valve flaps of Japuntich et al. could have a curvature from the first end to the second end when not attached to the valve body or to the face mask, that the curvature of the valve flap, or a portion thereof, could be at least partially flattened when the valve flap seals the opening, and that the flexible flap could be cut from a curved sheet of material. The Examiner has not identified where or how those assertions are supported by the reference itself, nor has the Examiner identified how these modifications would be suggested to one skilled in the art.

Furthermore, if it is the Examiner's intent to rely on inherent characteristics of the disclosure of Japuntich et al., then it should be noted that the requirements for a proper § 102 rejection based on inherent characteristics of the valve flaps of Japuntich et al. have not been met. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." M.P.E.P. § 2112(IV), (emphasis in original). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." M.P.E.P. § 2112(IV), citing, *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d

1949, 1950-51 (Fed. Cir. 1999). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." ." M.P.E.P. § 2112(IV), *citing*, *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Applicants submit that the Examiner has failed to show that the valve flaps of Japuntich et al. necessarily have the characteristics recited in independent claims 28 and 38.

In contrast to the invention recited in claims 28 and 38, Japuntich et al. teach valve flaps that do not have an inherent curvature that is at least partially flattened when the valve flap seals an opening. Rather, Japuntich et al. teach valve flaps that are themselves flat, and that are deformed when secured to, e.g., a valve seat and outside forces are applied thereto:

> Flexible flap 24 preferably is made from a material that is capable of displaying A bias toward seal ridge 30 when the flexible flap 24 is secured to the valve seat 26 at surface 40. The flexible flap preferably assumes a flat configuration where no forces are applied and is elastomeric and is resistant to permanent set and creep.
> Japuntich et al., column 7, lines 27-34.

> Flexible flap 24 may be cut from a flat sheet of material having a generally uniform thickness.
> Japuntich et al., column 7, lines 55-56.

> Seal ridge 30 has a concave curvature . . . [that] corresponds to the deformation curve displayed by the flexible flap when it is secured as a cantilever beam.
> Japuntich et al., column 6, lines 14-17 (emphasis added).

In other words, Japuntich et al. teach valve flaps that are flat when not secured to a valve seat, and which display a deformation curve when in a closed position resting on the seal ridge (Japuntich et al., col. 6, lines 12-13). Japuntich et al. do not teach valve flaps with a side profile

having a curvature when the valve flap is not attached to a valve body or face mask, wherein the curvature, or a portion of the curvature, is at least partially flattened when the valve flap seals the opening, as asserted in support of this rejection.

Additionally, for at least the reason that Japuntich et al. fail to teach each and every aspect of independent claims 28 and 38, Japuntich et al. also fail to teach each and every aspect of claims 29-35 and 38-45, dependent directly or ultimately thereto.

For at least the reasons stated above, Applicants submit that claims 28-35 and 38-45 are not anticipated by Japuntich et al. Reconsideration and withdrawal of the rejection are, therefore, respectfully requested.

Summary

It is respectfully submitted that the pending claims 15-47 are in condition for allowance and notification to that effect is respectfully requested.

The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted
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CERTIFICATE UNDER 37 CFR §1.8:
The undersigned hereby certifies that the Transmittal Letter and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to **Mail Stop AF**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28th day of February 2006, at 3:13 p.m. (Central Time).

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